

PTO/SB/21 (08-00)

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

Application Number	10/043,337
Filing Date	January 14, 2002
First Named Inventor	Wayne Ernest Conrad
Group Art Unit	1724
Examiner Name	Richard L. Chiesa
Attorney Docket Number	12811-39

Total Number of Pages in This Submission

ENCLOSURES (check all that apply)☒ Fee Transmittal Form☒ Fee Attached☐ Amendment / Response☐ After Final☐ Affidavits/declaration(s)☒ Extension of Time Request☐ Express Abandonment Request☐ Information Disclosure Statement☐ Certified Copy of Priority Document(s)☐ Response to Missing Parts/
Incomplete Application☐ Response to Missing
Parts under 37 CFR
1.52 or 1.53☐ Assignment Papers
(for an Application)☐ Drawing(s)☐ Licensing-related Papers☐ Petition☐ Petition to Convert to a
Provisional Application☐ Power of Attorney, Revocation
Change of Correspondence Address☐ Terminal Disclaimer☐ Request for Refund☐ CD, Number of CD(s)☐ After Allowance Communication to
Group☐ Appeal Communication to Board of
Appeals and Interferences☐ Appeal Communication to Group
(Appeal Notice, Brief, Reply Brief)☐ Proprietary Information☐ Status Letter☒ Other Enclosure(s)
(please identify below)**Request for Continued
Examination (RCE) Transmittal**

Remarks

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENTFirm
or
Individual name

BERESKIN & PARR

Signature

Philip C. Mendes da Costa Reg No 33,106

Date

December 11, 2003

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addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date

Typed or printed name

Signature

Date

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PTO/SB/17 (10-03)

Approved for use through 07/31/2006, OMB 0651-0032

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003 Patent fees are subject to annual revision.

Applicant claims small entity status See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 880.00

Complete if Known

Application Number 10/043,337
 Filing Date January 14, 2002
 First Named Inventor Ernest Wayne Conrad
 Examiner Name Richard L. Chiesa
 Art Unit 1724
 Attorney Docket No. 12811-39

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

Deposit Account:

 Deposit Account Number
 Deposit Account Name

022095

Bereskin & Parr

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	20	X	0.00
Multiple Dependent	3	X	0.00

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1202 18	2202 9	Claims in excess of 20	
1201 86	2201 43	Independent claims in excess of 3	
1203 280	2203 145	Multiple dependent claim, if not paid	
1204 86	2204 43	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)			0.00

*or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oam	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	110.00
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	770.00
1802 900	1802 900	Request for expedited examination or a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 880.00

SUBMITTED BY

Name (Print/Type)

Philip C. Mendes da Costa

Registration No. (Attorney/Agent)

33,106

(Complete if applicable)

Telephone (416) 364-7311

Signature

Date

December 11, 2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PTO/SB/30 (08-00)

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REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1995. See The American Inventors Protection Act of 1999 (AIPA).

Application Number	10/043,337
Filing Date	January 14, 2002
Examiner Name	Richard L. Chiesa
First Named Inventor	Wayne Ernest Conrad
Group Art Unit	1724
Attorney Docket Number	12811-39

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application
NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53 (d) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1

Submission required under 37 C.F.R. § 1.114

- a ☐ Previously submitted
- i. ☐ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on (Any unentered amendment(s) referred to above will be entered)
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on
- iii. ☐ Other
- b Enclosed
- i. ☒ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☒ Other Request for Extension of Time

2.

Miscellaneous

- a ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of _____ months (Period of suspension shall not exceed 3 months, Fee under 37 C.F.R. § 1.17(i) required)
- b ☐ Other

3


Fees

The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed

- a ☒ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. 022095
- i. ☒ RCE fee required under 37 C.F.R. § 1.17(e) 12/12/2003 HGBREH1 00000091 022095 10043337
- ii. ☒ Extension of time fee (37 C.F.R. §§ 1.136 and 1.17) 01 FC:1801 770.00 DA
- iii. ☐ Other
- b ☐ Check in the amount of \$ _____ enclosed
- c ☐ Payment by credit card (Form PTO-2038 enclosed)

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

Name (Print/Type)	Philip C. Mendes da Costa	Registration No. (Attorney/Agent)	33,106
Signature		Date	December 11, 2003

CERTIFICATE OF MAILING OR TRANSMISSION

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Applicant : Wayne Ernest Conrad
Appl. No : 10/043,337
Filed : January 14, 2002
Title : VACUUM CLEANER UTILIZING ELECTROSTATIC FILTRATION
AND ELECTROSTATIC PRECIPITATOR FOR USE THEREIN
Corp./A.U. : 1724
Examiner : Richard L. Chiesa
Docket No. : 12811-39/PMdC

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Honorable Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

RESPONSE

Sir:

This is in response to the Final Office Action dated August 11, 2003, and is accompanied by a Request for Continued Examination and a request for a one-month extension of time and the associated fees of \$770.00 and \$110.00.

In the Office Action, the Examiner rejected claims 23, 27 and 32 under 35 U.S.C. 102(b) as being anticipated by, or in the alternative under 35 U.S.C. 103(a) as being obvious in view of, Rench et al. The Examiner stated that Rench et al. shows a vacuum cleaner with a cleaning head 111, a pivotally mounted upper body portion 10, a blower motor 61, removable cyclonic 21 and filter 23 separators. The Examiner stated that Rench et al. does not explicitly state the presence of a cyclonic container, but that it would be obvious to one skilled in the art that the 'pod' 27 is a container for cyclonic separator 21.

The applicant submits that claim 23 is directed to an upright vacuum cleaner having a cleaning head, an upper body portion pivotally mounted to the cleaning head, wherein the upper body portion includes a cyclonic cleaning stage having a removable cyclonic container therein. The vacuum cleaner further includes a motor for producing air flow, positioned above the cyclonic cleaning stage.

Typical upright vacuum cleaners have a common configuration whereby the motor is positioned in the floor cleaning head. One reason for this configuration is that the motor is typically heavy. If the motor were positioned in the handle at least some of the weight of the motor would always be carried by the user during use of the vacuum cleaner, when the handle is angled away from the vertical. The higher up the motor is on the

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Reply to Office action of

upper body, the more weight is carried by the user during use. As such, it has become conventional to position the motor close to, or more typically, in the floor cleaning head.

As a separate consideration, it is desirable to position the motor downstream from the filtering means in the vacuum cleaner so that air that enters the motor inlet has been cleaned by the filtering means. When the filtering means is positioned in the upper body of the vacuum cleaner, the air must be routed back down from the filtering means to the motor, which is typically positioned in the floor cleaning head.

The applicant has instead positioned the motor above the cyclonic cleaning stage. In so doing, the air conduit from the cyclonic cleaning stage to the motor inlet may be made short and free of bends. As a result, the configuration of the present invention provides for a lower pressure drop, relative to the prior art configuration described above whereby the air is routed back into the floor cleaning head.

As a result of the reduced pressure drop, the motor may be made smaller than the motor that would otherwise be required. A smaller motor reduces the load borne by the user as a result of the motor's positioning in the upper body portion. Alternatively, the motor may be kept the same size as would have been required if the motor were positioned in the floor cleaning head, however, the overall performance of the vacuum cleaner is improved, because of the reduced pressure drop losses between the filtering means and the motor.

The applicant submits that Rensch et al. differs from the claimed invention in several respects. The device of Rensch et al. does not have an upper body portion that is pivotally connected with respect to the cleaning head. The applicant submits that only the handle of Rensch et al., which is shown at 119 pivots with respect to the rest of the unit. Rensch et al. describes the handle at column 10, lines 26-33 as being pivotally mounted to the front and rear sections 115 and 117. The handle 119 is also described as being lockable via a latch 121 so that the entire machine can be tipped during use. The applicant submits that in order for the latch 121 to lock the handle 119 in position, the latch itself must be attached to a fixed (ie. non-pivoting) portion of the machine. The applicant submits that as shown in Figure 1, the latch 121 appears to be mounted in a position that precludes the possibility of the 'pod' 27 being pivotally connected to the floor engaging brushes, shown at 13 and 15. Accordingly, the applicant submits that the device of Rensch et al. does not meet the claim language of claim 23.

Furthermore, the applicant submits that the device of Rensch et al. is not an upright vacuum cleaner, but is instead a specialized device for stroking carpet cleaning granules through a carpet and along the carpet fibres. The device stands on two oversized counter-rotating brushes 13 and 15, which are positioned under a shroud 107 (see Figure 3). The applicant submits that the specialized nature and function of the device of Rensch et al. has resulted in its configuration, as described above, which is quite different from that of an upright vacuum cleaner. The applicant submits that a person skilled in the art would not look to the device of Rensch et al. particularly with

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respect to issues regarding the weight of the upper body portion and the resulting load on the user's hand when holding the upper body portion during use.

The applicant submits that claim 23 is neither anticipated by, nor obvious in view of Rench et al.

The applicant repeats and relies on the arguments made above for claim 23, for claims 27 and 32.

The Examiner has rejected claims 23, 27 and 32 under 35 U.S.C. 102(e) as being anticipated by, or in the alternative under 35 U.S.C. 103(a) as being obvious in view of Scalfani et al. The Examiner stated that Scalfani et al. shows a vacuum cleaner having a cleaning head 12, a pivotally mounted upper body portion 32, a blower motor 34 and removable cyclonic and filter separators 30 and 104. The Examiner admitted that Scalfani et al. does not disclose the presence of a cyclonic container, but does disclose a dirt cup 50. The Examiner stated that it would be obvious that the dirt cup 50 is a container for the cyclonic separation stage 30.

The applicant submits that the vacuum cleaner disclosed by Scalfani et al. is not an upright vacuum cleaner, but is instead a stick vacuum cleaner (see column 2, lines 51-52). The configuration disclosed by Scalfani et al. is typical of a stick vacuum cleaner, in that the device has essentially no components in the cleaning head, and instead has the filter means, the dirt cup and the motor all in the upper handle portion. Such vacuum cleaners are typically relatively lightweight and compact, and are designed for light duty cleaning only. As a direct result of its intended use, all of the components are relatively small as compared to an upright vacuum cleaner. For example, the suction inlet, the filter assembly and the motor are all typically significantly smaller than those provided on an upright vacuum cleaner, which directly results in their relative light weight. As a result of their light weight, the load borne by the user during use is generally small relative to the load borne by a user during use of an upright vacuum cleaner. Furthermore, as a result of the small size of the components of a stick vacuum cleaner all of the components are positioned relatively close to the cleaning head, regardless of their configuration. Therefore, the cleaning head supports a significant portion of the load during use, and the portion of the load borne by the user is again small relative to the load incurred by the user of an upright vacuum cleaner. As a result of the fundamental differences between stick vacuum cleaners and upright vacuum cleaners, a person skilled in the art would not look to a stick vacuum cleaner, such as the device of Scalfani et al. with respect to issues regarding weight and positioning of the motor.

The applicant submits that claim 23 is neither anticipated by, nor obvious in view of Scalfani et al. The applicant repeats and relies on the argument made above for claim 23, for claims 27 and 32.

The Examiner has rejected claims 28-31 under 35 U.S.C. 103(a) as being obvious in view of either of Rench et al. or Scalfani et al, in combination with Fry et al. The Examiner has reiterated his statements regarding Rench et al. and Scalfani et al, but

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admitted that neither Rensch et al, nor Scalfani et al disclose a second separation stage that is an electrostatic precipitator. The Examiner stated that Frey et al teaches a removable electrostatic precipitator positioned downstream from a cyclone and below a blower motor.

The applicant repeats and relies on the arguments made above for claim 23, for claims 28-31. Furthermore, the device of Frey et al. is taught in the context of a canister vacuum cleaner. The applicant submits that there is no motivation to combine components from the canister vacuum cleaner of Frey et al. with the stick vacuum cleaner of Scalfani et al, or with the specialized carpet cleaning device of Rensch et al. The applicant submits that such a combination of features could occur from these references only from a hindsight analysis. The applicant submits in any case, that the combination of features claimed in each of claims 28-31 are not obvious in view of Rensch et al, Scalfani et al and Frey et al, either singly or in combination.


The applicant acknowledges the Examiner's presumption regarding common ownership of the claims, and the obligation under 37 CFR 1.56 to point out the inventor and invention dates for any claims not commonly owned at the time a later invention was made.

The applicant submits that the application is now in condition for allowance. The applicant respectfully requests that a timely Notice of Allowance be issued in this case. If the Examiner should have any concerns, he is invited to contact the undersigned.

Respectfully submitted,

BERESKIN & PARR

By


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